

CLAIMS

1. A refuse collection system for use in combination with a transport vehicle, said system comprising:

a housing having a collection hopper at its first end, with an opening, and a storage compartment at its second end;

a packing arm movable front and rearwards within said housing and having a blade portion, said packing arm being movable along a generally arcuate path from a rest position behind said collection hopper and to an extended position forward of said collection hopper, the path of travel of said blade portion passing over said collection hopper to sweep refuse from the collection hopper into the storage compartment.

2. The refuse collection system of claim 1 wherein the housing is attached to a transport vehicle.

3. The refuse collection system of claim 1 wherein the opening is in the side of the housing.

4. The refuse collection system of claim 1 wherein the opening is in the top of the housing.

5. The refuse collection system of claim 1 wherein the collection hopper has a generally arcuate floor that closely tracks the path of the blade portion.

6. The refuse collection system of claim 1 wherein the width of the packing arm is equal to the width of the housing.

7. The refuse collection system of claim 1 wherein the packing arm has an integral curved member.

8. The refuse collection system of claim 1 wherein the blade portion has minimal clearance with the floor of the housing at the rest position and closely tracks the floor of the housing as the packing arm moves along the generally arcuate path through to its extended position.

9. The refuse collection system of claim 7 wherein the blade portion and the integral curved member form a single integral unit.

10. The refuse collection system of claim 7 wherein a shield portion connects the blade portion to the integral curved member.

11. The refuse collection system of claim 10 wherein the blade portion, the integral curved member and the shield portion are formed into a single integral unit.

12. The refuse collection system of claim 1 wherein the blade portion has a face that is

slanted such that an angle between the side of the blade face that engages refuse and the floor of the collection hopper is greater than 90 degrees.

13. The refuse collection system of claim 12 wherein the blade face can be altered so as to vary the angle between the blade face and the floor of the collection hopper.

14. The refuse collection system of claim 1 wherein the packing arm is pivotally suspended within the collection hopper.

15. The refuse collection system of claim 14 wherein the packing arm is pivotally suspended by a bar that extends through the first side of the collection hopper, through an aperture in the packing arm and then through the second side of the collection hopper.

16. The refuse collection system of claim 14 wherein bearing housings are attached to the top of the collection hopper and the packing arm is pivotally suspended by a bar that engages bearings within the bearing housings and the bar extends from a first bearing housing, through an aperture in the packing arm and then to a second bearing housing.

17. The refuse collection system of claim 1 wherein the storage compartment is divided into two or more sub-compartments.

18. The refuse collection system of claim 17 wherein the size of the sub-compartments may be varied.